

REMARKS

Claims 1, 3-8, and 12 are pending. Claims 4-5 stand withdrawn as directed to non-elected subject matter. Applicants appreciate the telephone conversation between the Examiner and Robert Stanley on June 24, 2004, regarding the Examiner's consideration of the Substitute Reply to Office Action filed April 15, 2004. Pursuant to that discussion, and the rejections made in the Final Office Action dated May 5, 2004, Applicants present the following arguments and remarks.

The Examiner has rejected claims 1, 3-8, and 12 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,587,010 to Shibasaki et al. in view of U.S. Patent No. 6,197,277 to Fukuda et al. The Examiner detailed the arguments for rejection in pages 2 to 5 of the Final Office Action. Generally, the Examiner believes Shibasaki et al. teaches alumina particles with a particle size of 1.0 μm or less and a thickness or 0.1 μm or less that render the pending claims obvious when combined with the teachings of Fukuda et al. related to zeta potential and the presence of phosphate compounds. Applicants respectfully traverse this rejection.

In order to prove a *prima facie* case of obviousness, the Examiner must show the existence of three criteria: (1) the references themselves, or knowledge commonly available, would suggest or motivate one of ordinary skill in the art to combine the references; (2) a reasonable expectation of success in combining the references; and (3) that the references, either separately or combined, teach or disclose each of the recited elements in the pending claims. See MPEP § 2143. Applicants submit that the Examiner has not shown any of these requirements.

The present application claims a composition and a cosmetic comprising alumina particles with an average major diameter of 0.5 to 25 μm , an aspect ratio of 55 to 2000, and a phosphoric compound present in an amount of about 0.2% to about 5.0%. Shibasaki et al. never discusses the aspect ratio of its particles and never suggests the use of a phosphoric compound. The reference focuses on creating "fine flaky alumina particles, preferably fine flaky alumina particles on the order of submicron suitable as a raw material for fine ceramics, at high efficiency" (col. 2, lines 16-18). Submicron particles are defined as those with a particle size of 1.0 μm or less (col. 1, lines 53-54). In fact, Shibasaki et al. specifically teaches away from particles above 1.0 μm when it discusses problems with a hydrothermal synthesis process creating a particle size even on the order of "several microns" (col. 2, lines 6-10). By concentrating on uses in ceramics and paints, the reference ignores the presence of a large aspect ratio and instead focuses on small particles, the size of which is not suitable for cosmetic use.

Applicants were well aware of the disclosure of Shibasaki et al. at the time they filed the present application. The cited reference claims priority to Japanese Patent Application No. 3-193668 filed on July 9, 1991. The Japanese application published as Japanese Publication No. 5-17132 on January 26, 1993 (see Appendix A and the Information Disclosure Statement filed April 16, 2001), and is the subject of the discussion in paragraph [0003] of the present application. Despite the fact that the Shibaskaki et al. particles "exhibited an improved dispersibility when kneaded with a resin component," the inventors noted that those particles "still have problems or difficulties in reducing the surface roughness of an article to be polished or in providing a cosmetic powder with a sufficient spreadability" Thus, Applicants considered the

disclosed particles of Shibasaki et al. and, finding them inappropriate for the problem they were trying to solve, set out to discover new particles. Significantly, the embodiments of the present invention disclosed in Examples 1-4 each possess an average particle major diameter in excess of submicron (see Table 2 on page 20) and, therefore, stand against the teachings of fine particles taught by Shibasaki et al.

With this distinction in mind, Applicants continue to assert that the alumina particles disclosed in Shibasaki et al. would not reach the claimed aspect ratio range. The Examiner states that “even if particle diameter and thickness both decrease under the temperature and pressure of Shibasaki et al., the reference still meets the instant aspect ratio. For example a particle with a diameter of 0.9 μ m and a thickness of 0.01 μ m, results in an aspect ratio of 90” (Final Office Action at page 3). Such a high aspect ratio is simply not contemplated by Shibasaki et al. and is the result only of the Examiner's improper tinkering with the reference's teachings in light of the present application and claims. See MPEP § 2145X (stating that hindsight reasoning is not permitted when it includes knowledge gleaned only from the application's disclosure).

Example 3 of Shibasaki et al. produces alumina particles with a “uniform particle diameter of a little less than about 1.0 μ m and a thickness of about 0.1 μ m” (col. 4, lines 57-58). Examples 1 and 2 disclose that changes in particle diameter create corresponding directional changes in the thickness of the particle. Thus, Applicants agree that one of ordinary skill in the art would expect that a particle disclosed by Shibasaki et al. that has a particle of diameter of 0.9 μ m to have a thickness of less than about 0.1 μ m. However, the reference nowhere teaches or even suggests that such a particle with only a 10% reduction in diameter would have a 90% reduction in thickness,

as required by the Examiner's math. Even with the Examiner's comment that the reference "does not state that the decrease in diameter and thickness is proportionate" (Final Office Action at page 3), it is undoubtedly unreasonable to believe that the particles would be so significantly thinner with only a relatively small change in diameter. Further, Applicants submit that particles of the Examiner's hypothetical configuration would break apart under the "kneading . . . with an organic water holding material and water" required to create the claimed alumina-based plastic material (see col. 6, lines 9-16 and claim 1), thus rendering the particles unsuitable for their intended use. See MPEP § 2143.02.

The instant specification states that particles with an average thickness of less than 0.1 μm tend to cause crumbling during the course of production of a cosmetic product (page 13, paragraph [0043]). The Examiner chastises Applicants for citing this passage, stating that "it is not even commensurate in scope with the instant claims" (Final Office Action at page 5). In response, Applicants point out to the Examiner that pending claims 6-8 specifically recite a cosmetic comprising flaky α -alumina particles; therefore, Applicants assert that this passage is commensurate in scope with at least those pending claims.

In addition, the Examiner continually cites *In re Rose*, 105 U.S.P.Q. 237 (C.C.P.A. 1955), in support of motivation to modify Shibasaki et al., yet Applicants believe that its holding is inapplicable when applied to the instant rejection (see MPEP § 2143.03 (stating that "legal precedent can provide the rationale supporting obviousness only if the facts in the case are sufficiently similar to those in the application")). The Examiner states the case holds that "a change in size is generally

recognized as being within the level of ordinary skill in the art” (Final Office Action at page 3). As its “change in size” *Rose* dealt with a composite package of lumber bundles “of appreciable size and weight requiring handling by a lift truck” (105 U.S.P.Q. at 239). The court believed that the bundles themselves were obvious in view of those described in the prior art and that the “size and weight” limitation was not “patentably significant since it at most relates to the size of the article under consideration which is not ordinarily a matter of invention” (*id.* at 240-241). Prior art references taught similar lumber bundles, though of a smaller size that could be lifted by hand (*id.* at 240).

In *Rose* the court found a change in size unpatentable because the difference between the claimed objects and the prior art rested merely in the quantity of the objects being of “appreciable size and weight.” Quite differently, Applicants here claim an invention that has patentable differences beyond merely increasing the quantity of well-known particles, because the particles themselves are not obvious in view of the prior art. In fact, *In re Yount*, the case relied upon in *Rose* as precedent for the its holding, found the “change in size” of the claimed paper bags not patentably significant where the applicant did not actually specify the large size in the claims and taught that the large bags were equivalent to small bags in the specification. 171 F.2d 317, 318 (C.C.P.A. 1948). Applicants here have properly claimed alumina particles with a larger aspect ratio and specifically noted that the claimed particles are not equivalent to those revealed in Shibasaki et al. With patentable differences beyond merely aggregating a larger number of previously known particles, the “change in size” relevant to the holding of *Rose* does not apply to the pending claims and, therefore, Applicants believe that *Rose* does not support an obviousness rejection over Shibasaki et al.

Even if the broadest teachings of Shibasaki et al. could mathematically encompass the claimed aspect ratio range, the reference provides absolutely no guidance to achieve particles with the claimed range and, in fact, expressly teaches particles of a size outside the claimed range. Moreover, the reference specifically teaches away from particles larger than submicron in size and never discloses the use of the particles in cosmetics. With all of these glaring omissions, one of ordinary skill simply would not be motivated to modify the teachings of Shibasaki et al. to achieve the claimed alumina particles and would not have a reasonable expectation of success.

Moreover, in light of the teachings of Shibasaki et al., one of ordinary skill would not be motivated to combine that reference with Fukuda et al. and the Examiner has not provided any proof of such motivation. The Examiner relies on Fukuda et al. only to teach a phosphoric compound and zeta potential (see Final Office Action at page 5). Whatever the secondary reference's disclosure of phosphoric compounds may add to the teachings of Shibasaki et al., the combination simply lacks any teaching or suggestion of alumina particles with aspect ratios of 55 to 2000, as recited in the pending claims. Because the two references, either separately or in combination, do not provide any suggestion or motivation to modify their teachings to achieve the alumina particles of the pending claims and do not teach or suggest all the claimed limitations, Applicants request that the Examiner withdraw this rejection.

In view of the foregoing arguments and remarks, Applicants submit that the Examiner has not proven a *prima facie* case of the obviousness of the pending claims over Shibasaki et al. in view of Fukuda et al. Therefore, Applicants respectfully request the reconsideration and the continued examination of this application and the timely

allowance of the pending claims. If the Examiner does not find that this Reply places the pending claims in condition for allowance, Applicants invite the Examiner to contact the undersigned at 404-653-6441 to discuss an appropriate resolution.

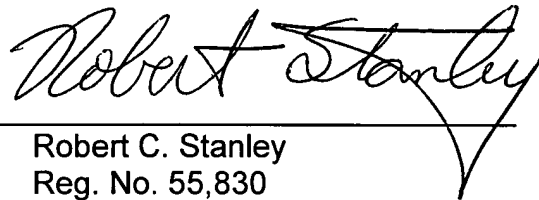
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: August 5, 2004

By: _____


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